

A Comparison of Senior High School Curriculum Between Indonesia and Japan

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Abstract

Indonesia and Japan are two countries that uphold high manners with education from an early age. Indonesia is a large developing countries from Sabang to Merauke, a country with Muslim majorities, and has many tribes and races. On the other side, Japan is one of the countries in Asia which is known for its technological and educational advancements. Japan is a developed country. The aim of this paper is compare the curriculum of the senior high school between Indonesia and Japan. Data collection techniques through internet from the official website of the Ministry of education and culture in Indonesia and Japan and various research reports, journals, and research papers. The data were analyzed critically by looking at the similarities and differences in the curriculum of the two countries and relating them to several influencing factors. There are three component to compare curriculum in senior high school, consist of the curriculum focus in senior high school level, the characteristics of curriculum, and structure curriculum in senior high school level.

Keywords: Indonesia, Japan, curriculum, senior high school, comparative study

INTRODUCTION

The differences in curriculum characteristics become fundamental for the output of curriculum between Indonesia and Japan. Indonesia and Japan have some similarity and differences about curriculum in senior high school according NIER or National Institute for Educational Research (1999). The similarity curriculum in Indonesia and Japan, such as have a highly centralized curriculum development process with the name of agency initiating of curriculum development is Ministry of education and both of country are reducing the number of school days untill Saturdays. For the differences, Indonesia has the religious goals included in the curriculum. In the type reporting, Indonesia is using paper and pencil tests and also performance tests in every level of school. however in Japan using paper and pencil tests and also practical work in every level of school. Interestingly, In the standards and curricula used in Japan, students have consistently performed at the highest levels on international assessments of mathematics such as the Third International Mathematics and Science Study (TIMSS) (Third International Mathematics and Science Study, 2015).

Japan's curriculum is set out logically, with information on the content that is to be covered each year in a step by step manner. The content is highly demanding and sets out what students need to understand in order to progress. There is a great deal of concentration on

essential subjects, considered to be Japanese, mathematics, science, social studies and foreign language (generally English). Emphasis in mathematics and science is on conceptual understanding. The curriculum is organized by subject and contains considerable amounts of factual matter that students have to master (Isaacs et al, 2015).

Indonesia has experienced 11 times curriculum changes. This last curriculum is the curriculum 2013. Characteristics of the curriculum 2013 is places more emphasis on developing attitude, knowledge, and skills of students and apply it in various situations in schools and communities. So that it can creating human resources that can deal with it problems affecting the nation (Zaini, 2015).

METHOD

This study using comparative study with analytical survey method because of the aim to compare curriculum of senior high school between Indonesia and Japan. According to Esser and Vliegthart (2017) comparative study has specific scientific advantages, it is essential that the objects of analysis are compared on the basis of a common theoretical framework and that this is performed by drawing on equivalent conceptualizations and methods. The study collect the data from different research reports, journals and research papers and various websites of senior high school of Indonesia and Japan. The data was analyzed critically use logical approach considering various factors related with curriculum of senior high school of Indonesia and Japan.

RESULTS AND DISCUSSION

The result of comparing between curriculum in senior high school Indonesia and Japan. Indonesian curriculum from Ministry of education and culture (Indonesian Ministry of Education and Culture, 2018) with name of curriculum is Curriculum 2013 (K13) and Japanese curriculum in senior high school from Ministry of Education, Culture, Sports, Science and Technology-Japan (Ministry of Education, Culture, Sports, Science and Technology-Japan). There are component to compare curriculum in senior high school, such as; the curriculum focus in senior high school level (Table 1), the characteristics of curriculum (Table 2), and structure curriculum in senior high school level (Table 3).

Table 1. The curriculum Focus in Senior high school

The Curriculum focus in senior high school level (NIER, 1999)	
Indonesia	Japan
National development needs science, technology, arts, environment, civic education, religious education, reading, writing, and mathematics	National standards to introduce and reinforce moral and civic education. Emphasis on international understanding in moral education

Interesting to know that the big challenge faced Indonesia is how strive for human resources of productive age this abundance can be transformed into a resource humans who have competence and skills through education. Currently the population of Indonesia is of productive age (15-64 years) more than unproductive age (children aged 0-14 years and parents aged 65 years and over). The population of this productive age will reach its peak in 2020-2035 when the number reached 70% (Indonesian Ministry of Education and Culture, 2018). This is consistent with the focus of the curriculum that national development needs science, technology, arts, environment, civic education, religious education, reading, writing, and mathematics (National Institute for Educational Research, 1999). Different with Indonesia, the curriculum focus in Japan is national standards to introduce and reinforce moral and civic education. Emphasis on international understanding in moral education. They are very focus on moral education. According to Japanese Ministry of Education, Science and Culture (1983) moral education must aim at cultivating moral virtue as an important foundation for educating Japanese citizens who are able to manifest respect for humans in their daily lives at home, at school and in society, to strive for the creation of a culture that is differentiated by the national. for individuality and for the development of a democratic society and nation, and for voluntary contributions for a peaceful international society.

Table 2. The Characteristics of Curriculum

The Characteristic of Curriculum	
Indonesia	Japan
1. Develop a balance between spiritual and social attitudes, knowledge, and skills, and apply them in various situations in schools and communities;	1. To accomplish the well - balanced development of individual students as human beings, with full consideration for the realities of the school and its region, the characteristics of the courses and the abilities, aptitudes and future courses of students.
2. Placing schools as part of a community provide learning experiences so that students are able apply what is learned in school to the community and utilizing the community as a source of learning;	2. Should be a basic principle that moral education in school should be provided throughout all the educational activities of the school.
3. Give enough free time to develop various attitudes, knowledge, and skills;	3. For physical education in school, proper guidance should be given through all the educational activities of the school. At the same time, the practice of appropriate physical exercises in daily life should be
4. Develop competencies expressed in terms of core class competencies which are further specified in competencies basic subjects;	
5. Developing core class competencies into elements organizing elements of basic competencies. All basic competencies and learning processes	

The Characteristic of Curriculum	
Indonesia	Japan
developed for achieve competencies expressed in core competencies;	encouraged through such guidance.
6. Develop basic competencies based on principles accumulative, mutually reinforcing (reinforced) and enriching (enriched) between subjects and levels of education (organization horizontal and vertical).	4. In the school, proper guidance should be given, in conformity with the realities of the school and its region, to provide the students with work experience so that students may appreciate the pleasure of working and creation, and develop a desirable view of work as well as occupation.

We know that before, the problem in Indonesia is abundance of productive age. So, Indonesia must prepare the curriculum in senior high school for future career. Based on Table 2, the characteristic of curriculum in Indonesia focus to increase competencies inside and outside of school. In the characteristic of curriculum in Japan, the main of education to prepare for the future of senior high school graduates is clearly written that education must provide real world problems in daily life.

Table 3. Structure of the curriculum in senior high school level in Indonesia

Subject		Time Allocation / week		
		X	XI	XII
subjects group A (general)				
1	Religion and manner education	3	3	3
2	Pancasila Education and Citizenship	2	2	2
3	Indonesia Language	4	4	4
4	Mathematics	4	4	4
5	History of Indonesia	2	2	2
6	English	2	2	2
subjects group B (general)				
7	Sports physical Education and health	2	2	2
8	Art and Culture	3	3	3
9	Craft and Entrepreneurship	2	2	2
Number of group A and B class hours per week		24	24	24
Subject group C (specialization)				
Academic specialization subjects		9 or 12	12 or 16	12 or 16
Elective subjects		6 or 9	4 or 8	4 or 8
Number of group A, B and C class hours per week		42	44	44

Table 4. Structure curriculum in senior high school level in Japan

Subject		Time Allocation / week		
		X	XI	XII
1	Japanese	5	4	-
2	Contemporary Society	4	-	-
3	Japanese History or World History	-	3	2
4	Modern Literature	-	-	3
5	Mathematics	6	6	10
6	Science	4	8	8
7	English	6	5	6
8	Physical Education and Home economics	5	4	3
9	Music or Calligraphy	2	1	-
10	Homeroom	1	1	1
11	Club activities	1	2	1
Total class hours per week		34	34	34

Based on Table 3, structure of the senior high school curriculum consists of general subjects group A, general subjects group B, and subjects academic specialization in group C. Subjects in academic specialization group C is grouped on the subject of Specialization in Mathematics and Natural Sciences, Specialization subjects Social Knowledge, and Language Specialization subjects and Culture. General subject group A is a curricular program which supports competence, competence knowledge, and expertise as learners' skills the basis for strengthening capabilities in social life, nation and state. General subjects in groups B are curricular programs which support competence, competence knowledge, and competency of students related skills Environment in the social, cultural, and artistic fields.

Group C academic specialization subjects are curricular programs that support competency development competencies, knowledge competencies, and skills competency students according to their interests, talents and / or abilities academics in a collection of scientific subjects (Table 5).

Table 5: Academic Specialization Subjects

Subject		Time Allocation / week		
		X	XI	XII
I. Specialization in Mathematics and Natural Sciences				
1	Mathematics	3	4	4
2	Biology	3	4	4
3	Physics	3	4	4
4	Chemistry	3	4	4
II. Specialization in Social science				
5	Geography	3	4	4
6	History	3	4	4
7	Sociology	3	4	4
8	Economy	3	4	4
III. Specialization in Language and Culture				
9	Indonesian Language and Literature	3	4	4
10	English Language and Literature	3	4	4

Subject		Time Allocation / week		
		X	XI	XII
11	Other Foreign Languages and Literature (Arabic, Mandarin, Japanese, Korean, German, French)	3	4	4
12	Anthropology	3	4	4
Elective subject				
Cross-interest and / or Deepening of interest and / or Informatics		6 or 9	4 or 8	4 or 8

Based on Table 4, Japanese senior high school students do not provide individual class schedules for elective subjects. Elective subjects such as driver education, drama, or psychology are not offered. students only have elective music, fine arts, or calligraphy options to meet the art requirements. These elective subjects are often given on university entrance exams.

Although moral education as a formal subject in the curriculum disappears at the upper secondary level, student guidance and character development continue to receive attention. However, the challenge shifted from training in basic life and classroom behavior from the lower classes to the further development of a disciplined attitude towards work and learning.

In academic programs, only 9 class hours per week are devoted to non-academic subjects. During this time, boys receive 4 hours of physical education and girls receive 2 hours of physical education and 2 household economics. Both boys and girls take 1 hour of health and 2 hours of fine arts. The weekly schedule also addresses each one hour of classroom and club-led club activities.

There are differences in the structure of the senior high school curriculum in Indonesia and Japan. curriculum structure in Indonesia, the names of subjects are generally mentioned, such as mathematics which includes calculus, algebra and so on. while the curriculum structure in Japan, subjects are explicitly mentioned, for example in general mathematics only exists in class X, whereas in class XI, specifically mentioned the name of subjects that include deepening mathematics is Algebra & Geometry Basic Mathematical Analysis, and in class XII are Integral and Differential, Calculus, Probability and Statistics.

The difference is also found in the choice of major class. In Indonesia the naming for class choices is Specialization in Mathematics and Natural Sciences and Specialization in Social Science. Specialization in Mathematics and Natural Sciences consists of mathematics, biology, physics, and chemistry. Whereas Specialization in Social science consists of geography, history, sociology and economics. in Japan the naming for class choices consists of Major and Science Major literature. the apparent difference between the Major and Science

Major literature is that biology only exists in the major literature, whereas in the science major there is physics and chemistry.

The difference in time allocation is very different in amount per week. Time allocation for senior high school in Japan is 34 hours/week for classes X to XII. while for senior high school in Indonesia is 42 hours/week for class X students and 44 hours /week for class XI and XII students.

CONCLUSION

There are three component to compare curriculum in senior high school, consist of the curriculum focus in senior high school level, the characteristics of curriculum, and structure curriculum in senior high school level. This comparison will be benefit to Japanese and Indonesian researchers as a literature to conduct the future studies related to the curriculum research.

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